

## Development of sustainable transport in smart cities

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### Abstract

© 2017 IEEE. Smart Mobility is one of the main directions of transportation systems development in Smart Cities. In this case along with intellectualization of management the issue of transition to 'green', safe and sustainable modes of transport, such as bicycle, should be solved. Democracy and availability, cheapness and environmental friendliness, promotion of healthy lifestyle are the reasons for the growing popularity of this mode of transport all over the world. This paper proposes one of the possible ways of bicycle transport development in smart city, that allows expanding the number of users by reducing physical requirements for cyclist. The proposed development represents a concept of the Smart Bike that monitors condition of the cyclist and environment and turns on electric motor in critical situations. This reduces physical load of cyclist, as well as the battery consumption, that positively affects the ecology of Smart Cities.

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### Keywords

Internet of Things, Smart Bike, Smart City, Transport System

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